

Response dated: December 18, 2009
App. No. 10/658,449; Filed: September 9, 2003
Response to Office Action of June 18, 2009

CLAIM LISTING

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. *(Currently Amended)* A prosthesis to replace all or a portion of a natural facet joint on a vertebral body comprising a prosthesis body accommodating fixation to the vertebral body at or near a pedicle and without support by a lamina, the prosthesis body including spinal prosthesis, comprising:

a first prosthesis body sized, shaped, and oriented to span the distance between a first pedicle of a vertebral body and a first inferior articular process on the opposite side of the vertebral body from the first pedicle;

a second prosthesis body sized, shaped, and oriented to span the distance between a second pedicle of the vertebral body and a second inferior articular process on the opposite side of the vertebral body from the second pedicle;

a fastening element coupled to each of the first and second prosthesis bodies, the fastening elements configured to be installed within the vertebral body at or near a pedicle, and the first and second pedicles; and

an artificial facet joint structure carried by each of the first and second prosthesis body bodies at a location locations spaced from the fastening element, the artificial facet joint structure being adapted and configured to replace all or a portion of a natural facet joint elements.

2. *(Canceled)*

3. *(Canceled)*

4. *(Currently Amended)* A prosthesis according to claim 1 wherein the each prosthesis body includes a caudal bearing structure that extends positioned on an opposite side of each prosthesis body from the fastening element toward a cephalad portion of a natural facet

Response dated: December 18, 2009
App. No. 10/658,449; Filed: September 9, 2003
Response to Office Action of June 18, 2009

~~joint when the prosthesis body is fixed to the vertebral body, and wherein the artificial facet joint structure is carried on the caudal structure elements.~~

5. *(Currently Amended)* A prosthesis according to claim 1 wherein the artificial facet joint structure is adapted and configured ~~structures are sized, shaped, and oriented to~~ to articulate with a portion of a facet joint of an adjoining vertebral body.

6. *(Canceled)*

7. *(Currently Amended)* A prosthesis according to claim 1 wherein the artificial facet joint structure is adapted and configured to replace a cephalad portion of a natural facet joint and ~~structures are sized, shaped, and oriented to~~ articulate with a caudal portion of a facet joint of ~~second spinal prosthesis mounted on~~ an adjoining vertebral body.

8. *(Currently Amended)* A prosthesis according to claim 1 wherein the artificial facet joint structure is ~~structures are fixed to the prosthesis body bodies.~~

9. *(Currently Amended)* A prosthesis according to claim 1 wherein the artificial facet joint structure is ~~structures are fixed to the prosthesis body bodies~~ by adhesive or cement.

10. *(Currently Amended)* A prosthesis according to claim 1 wherein the artificial facet joint structure is ~~structures are fixed to the prosthesis body bodies~~ by mechanical attachment.

11. *(Currently Amended)* A prosthesis according to claim 1 wherein the artificial facet joint structure is ~~structures are removably carried by the prosthesis body bodies.~~

Response dated: December 18, 2009
App. No. 10/658,449; Filed: September 9, 2003
Response to Office Action of June 18, 2009

12. *(Currently Amended)* A prosthesis according to claim 1 wherein the artificial facet joint structure is structures are removably attached to the prosthesis body bodies by frictional engagement.

13. *(Currently Amended)* A prosthesis according to claim 1 wherein the artificial facet joint structure is structures are removably attached to the prosthesis body bodies by a Morse taper.

14. *(Currently Amended)* A prosthesis according to claim 1 wherein the artificial facet joint structure comprises structures comprise an insert fitted to the prosthesis body bodies.

15. *(Currently Amended)* A prosthesis according to claim 1 wherein the artificial facet joint structure comprises structures comprise an insert fitted by frictional engagement to the prosthesis body bodies.

16. *(Currently Amended)* A prosthesis according to claim 1 wherein the artificial facet joint structure comprises structures comprise an insert fitted by a Morse taper to the prosthesis body bodies.

17. *(Currently Amended)* A prosthesis according to claim 1 wherein the artificial facet joint structure comprises structures comprise a removable insert fitted to the prosthesis body bodies.

18. *(Currently Amended)* A prosthesis according to claim 1 wherein the artificial facet joint structure pitvts structures pivot with respect to the prosthesis body bodies.

19. *(Canceled)*

Response dated: December 18, 2009
App. No. 10/658,449; Filed: September 9, 2003
Response to Office Action of June 18, 2009

20. *(Currently Amended)* A prosthesis according to claim 19 wherein the at least one selected prosthetic material is 1 wherein the prosthesis is made from a material selected from a group consisting of polyethylene, rubber, tantalum, titanium, chrome cobalt, surgical steel, bony in-growth material, ceramic, artificial bone, or a combination thereof.

21. *(Canceled)*

22. *(Currently Amended)* A prosthesis according to claim 1 wherein the each prosthesis body includes a bony in-growth material.

23. *(Canceled)*

24. *(Currently Amended)* A prosthesis according to claim 1 wherein the each fastening element includes a bony in-growth material.

25. *(Withdrawn)* A method of replacing, on a vertebral body, all or a portion of a natural facet joint using the prosthesis defined in claim 1 to provide improved support for the spinal column, the method comprising the steps of (i) removing all or a portion of a natural articular process from the vertebral body, and (ii) fixing the prosthesis as defined in claim 1 to the vertebral body to replace the removed portion of the natural articular process with the artificial facet joint structure.

26. *(Withdrawn)* A method according to claim 25 further including a step of removing at least some of the lamina from the vertebral body.

27. *(Withdrawn)* A method according to claim 25 further including a step of removing at least part of a pedicle from the vertebral body.